

Original Research

Barriers and Facilitators to Meditation: Empirical Research Qualitative

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Abstract

This study aims to investigate the barriers and facilitators to meditation in the general population. This research is significant because understanding these factors can inform the design of more effective public mental health interventions and support the integration of meditation into daily life. A qualitative thematic analysis was conducted on the qualitative component of wider survey responses. Participants were recruited from MeditationHQ, which offers weekly group meditation sessions on beaches around Australia. Participants were invited to join the OMM: One Million Meditations Challenge and the University Meditation Challenge to meditate regularly over a month. Data was obtained from the completion of surveys before and after the challenge to capture their meditation experiences. Data analysis of open-ended questions followed Braun and Clarke's Thematic Analysis framework, involving familiarisation with the data, coding responses, generating themes, defining themes, and presenting findings. Findings were validated with a second researcher. In total 191 participants completed the survey. Most participants did not report significant barriers to meditation. For those who did, practical challenges (e.g., scheduling difficulties) and mental health related challenges (e.g., busy mind, stress, and anxiety) were the most common. Key



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facilitators included manageable goal setting (e.g., engaging in short and regular practice) and mindset changes (e.g., better understanding of meditation goals). Meditation is a promising intervention that can be integrated into public health strategies to support mental health. This study offers practical insights into its implementation by identifying key barriers and facilitators. Practical implications include informing meditation toolkits that can educate and encourage the public to start a regular meditation routine, by encouraging brief and consistent practice and clarifying misconceptions about the goals of meditation. Limitations include a participant population that was predominantly female with prior meditation experience, which may reduce the generalisability of the findings. Future studies should target more diverse participants and consider the long-term outcomes of engaging with the strategies identified in this study. This manuscript adheres to the standards for reporting qualitative research. The findings from this study can inform the development of public health education tools aimed at encouraging regular meditation practice among the general population.

Keywords

Meditation; mindfulness; barriers; facilitators

1. Introduction

Meditation is a mind body practice composed of three core aspects: attention control, self-awareness, and emotion regulation [1]. Meditation has gained popularity over the last few decades in research, clinical, and public contexts as an effective self-care strategy to support overall mental wellbeing [1-3]. It is associated with a wide range of physical and mental benefits, including improvements in emotional regulation, and reduction in stress, depression, and anxiety in both clinical and non-clinical populations [4-8].

There are many techniques that come under the wider umbrella of meditation, one of which is mindfulness, a type of meditation characterised by a focused awareness of the present moment with an attitude of acceptance [9]. Meditation in the form of mindfulness-based interventions (MBIs) has become well established as a treatment alternative, most frequently consisting of regular daily mindfulness meditation practice over 8-10 weeks [10, 11]. A large meta-analysis found that mindfulness-based therapy was more effective than active controls such as relaxation and equally as effective as Cognitive Behavioural Therapy (CBT) in treating symptoms of physical and mental health symptoms [12].

Despite the growing evidence for benefits of meditation practice, the underlying neural and physiological mechanisms behind the effects of meditation are not fully understood and there have been multiple proposed theories [13-15]. A systematic review indicated that meditation positively impacts physiological markers of stress such as cortisol, blood pressure, and heart rate [16]. Experienced meditators have a faster cortisol recovery when responding to an acute psychosocial stressor compared to controls, through enhanced emotional regulation [17]. Functional FMRI imaging studies have found that meditation activates brain regions involved in attention (frontal and parietal cortices) and emotional regulation (insula) [18]. Long-term meditators also exhibit

increased grey matter density in several brain areas linked to learning, memory, emotion regulation, introspection, and empathy [18, 19].

Given the growing body of research on the efficacy of meditation, research on specific barriers to meditation is limited [20-22]. In addition to barriers to behavioural change more generally, recent research suggests that some barriers specific to meditation are similar to those described in traditional Buddhist literature, including doubts and challenges about the practice and experiencing unpleasant sensations or emotional experiences [23, 24].

The Determinants of Meditation Practice Inventory (DMPI), developed by Williams et al. [23], is a tool designed to identify barriers to meditation practice to optimise participant recruitment and adherence in research studies. They identified three main categories of barriers: perceptions and misconceptions, pragmatic concerns, and sociocultural beliefs [23]. Subsequently, Hunt et al. [24] validated the tool within a North American adult population and found support for most of the original items. They restructured the tool into four broad categories of barriers: low perceived benefit (e.g., beliefs that meditation is boring or unhelpful), inadequate knowledge (e.g., uncertainty about how to practise), pragmatic challenges (e.g., lack of time or a quiet space), and sociocultural conflict (e.g., concerns about religious incompatibility or social stigma) [24]. These barriers have also been reported in previous studies focused on select groups such as students or health practitioners [25-27]. For example, a study using a student population found that a major barrier to the completion of an 8-week online mindfulness program was limited time, along with the perception that the program was challenging [25]. Furthermore, misconceptions about meditation, such as viewing the wandering mind as a sign of poor practice, reduced motivation among nurses participating in a mindfulness-based program [26].

Conversely, fewer studies have explored the factors that help individuals sustain a meditation practice. These facilitators are equally important as barriers in understanding how to support long term engagement. While most MBIs are structured around 8-10 weeks of daily practice, recent research suggests that shorter interventions can also be effective. For example, a randomised controlled trial found that just four weeks of daily 13-minute meditation significantly improved cognitive function and mood compared to a control group [28]. Similarly, meta-analysis supports the efficacy of brief but consistent meditation, highlighting its potential as a practical and scalable public mental health intervention [29].

One example of existing qualitative work in this field is Darby and Beavan's [30] study of six experienced health professionals who undertook training in Mindfulness-integrated Cognitive Behaviour Therapy (MiCBT). MiCBT is a transdiagnostic intervention that integrates traditional cognitive behavioural techniques with mindfulness practices, designed to address a range of chronic mental health conditions [30]. The study identified key facilitators of sustained mindfulness practice, including the ability to reframe personal difficulties, such as anxiety, fatigue, and intrusive thoughts, as opportunities for growth [30]. This reappraisal process, described as "grist to the mill", reflected a broader shift toward embracing internal discomfort as a meaningful part of the practice [30]. Exposure to challenging emotional states, particularly anxiety, was seen as helpful in developing equanimity, which extended into participants' daily lives and contributed to both personal and professional benefits which motivated them to continue practising [30]. These findings demonstrate the importance of psychological reframing and emotional exposure as facilitators of engagement with mindfulness practices, an area that remains underexplored across broader populations and alternative mindfulness modalities.

Despite meditation being an accessible practice with numerous well-documented benefits, it remains underutilised, with limited research on the specific barriers and facilitators to its practice in the general population. This study, conducted in collaboration with MeditationHQ and Lifeline, aimed to explore these factors and sought to provide valuable insights for shaping public health interventions aimed at promoting meditation and supporting mental health. This research can inform the development of educational resources, such as online meditation toolkits that provide accessible and engaging digital content to support meditation practice. These toolkits can be widely promoted and adopted across diverse settings, including schools, workplaces, healthcare services, and public health campaigns. Organisations like Lifeline and MeditationHQ can leverage these strategies to encourage regular meditation habits within the community. Additionally, the findings can support policy-level initiatives aimed at integrating meditation into broader preventive mental health frameworks across various settings.

This study explores two core research questions: (1) What are the perceived barriers to meditation practice in the general population? and (2) What factors facilitate continued meditation practice? These questions are addressed through a qualitative analysis of open-ended survey responses from participants in two statewide meditation challenges. A qualitative approach was selected for its ability to capture rich, first-person descriptions of participants' experiences in their own words, allowing the emergence of unexpected insights not easily captured through pre-defined categories used in quantitative research. This method is particularly suited to understanding personal and contextual factors that influence meditation engagement.

2. Methods

2.1 Design

A qualitative thematic analysis was conducted on a subset of wider survey responses. This study focused on seven open-ended survey questions designed to elicit participants' motivations, experiences, barriers, and facilitators related to meditation. These questions were embedded in pre- and post-challenge surveys and are included below this paragraph. Although only question two and six directly asked about barriers and facilitators, responses across all seven questions contained relevant insights and were analysed and incorporated in the qualitative analysis. For instance, answers about participants' goals, perceived benefits, or advice to others frequently revealed underlying challenges to establishing practice or strategies that had helped them. By analysing all seven questions together, the study was able to capture a broader and more nuanced understanding of meditation engagement than would be possible by focusing solely on explicitly framed questions. Answers not relevant to the research questions were excluded from the analysis. The seven questions are listed below.

1. Describe what positive benefits meditation has on your life, if any.
2. Describe what negative impacts meditation has on your life, and what barriers you have to meditating once or regularly. Please be specific.
3. What needs or hopes do you have that you want fulfilled from your involvement in the OMM: One Million Meditations Project (that is meditating for one month each day, then joining the group event for a large meditation on the beach together)?
4. Do you take any prescribed medications, illicit substances or alcohol that you hope to reduce or cease taking from meditating for one month?

5. Describe any habits or things you do that you hope to increase or decrease from your involvement in OMM: One Million Meditations.
6. If you could pass on any messages and advice to other people about meditation, what would that be? How could people get more motivated to meditate regularly so they can gain the well-researched benefits from it? What advice could you give to others about how to overcome the barriers to meditating regularly?
7. Is there anything else you would like to add about meditation, your life, or the OMM: One Million Meditations (or University Meditation Challenge) project that the researchers should know?

2.2 Study Setting and Sample

The research team worked with MeditationHQ who liaised with Lifeline Australia to arrange the University Meditation Challenge (UMC) in Mental Health Month of October 2023 and the One Million Meditations (OMM) Challenge in May 2024, ending on the 21st May which was World Meditation Day. Participants were recruited from the MeditationHQ contacts. MeditationHQ is an organisation that hosts weekly group meditation sessions every Saturday at 6.30 am across many beaches in Australia and overseas, with approximately 15-20 people attending each session on each beach each Saturday. Group leaders for MeditationHQ are volunteers with training in how to run meditation groups. MeditationHQ provided 20-minute guided meditation sessions every day for a month for the UMC and OMM. These included a variety of meditation techniques and a range of guest meditation facilitators were used to deliver these guided meditations. They used techniques such as focussed attention meditation (e.g. mindfulness of breath), body awareness meditation (e.g. body scanning), loving-kindness meditation, and open awareness meditation.

2.3 Recruitment Procedure

Participants were recruited by MeditationHQ. Both new and existing attendees were invited by MeditationHQ leaders to participate in the UMC which took place in October 2023 for 31 days and the OMM Challenge which took place in May 2024 for 21 days. Separate groups participated in the two challenges. The challenges encouraged participants to meditate for approximately the whole month, with flexibility in frequency, duration, and type of meditation according to their personal preferences. Participants could choose to use daily guided meditations sent via email and/or attend an in-person group meditation every Saturday and at the end of the month. Participants were invited to complete surveys before and after the challenges regarding their meditation experiences. From the UMC, 147 completed the initial survey and 69 participants completed the second survey. From the OMM Challenge, 44 participants completed the initial survey, and 25 participants completed the second survey.

2.4 Data Collection

The same online survey was given to participants at the beginning and end of each challenge. The research purpose was clearly outlined. At the start of the survey, participants were asked to provide their consent by ticking a box before proceeding. Participants' identities were protected by deidentifying their data using the last three digits of their phone numbers. They were informed that

participation and survey completion was voluntary and would not affect their involvement with MeditationHQ. The survey was administered using the University of Sydney's RedCap platform, a secure system for capturing survey data. The data was digitised and securely stored on the University of Sydney's Research Data Storage (RDS) system. There were no foreseeable risks to participants, the research team, MeditationHQ, or Lifeline associated with the research.

2.5 Materials

A comprehensive survey consisting of multiple-choice, open-ended, and psychological screening questions was designed. Participants were asked to report on their existing meditation practices, if any, and meditation practices over the month. These multiple-choice questions investigated participants' meditation habits, perceived benefits, negative impacts, and barriers to regular practice. Demographic information was obtained [age, nationality, Australian citizenship (Yes/No), gender, postcode, highest education attained, marital status, number of children, religion, and mental illness history (see Table 1). Seven open-ended questions were included to allow participants to freely express their experiences regarding meditation, including benefits, barriers, and facilitators to meditation. Six psychological screening tools were incorporated to assess psychological status. This study focused on responses to the previously stated seven open-ended questions.

Table 1 Demographic Characteristics of Participants.

	Description	Number	Percentage
Age	Under 18	2	1.0
	18-30	14	7.3
	31-40	15	7.9
	41-50	34	17.8
	51-60	55	28.8
	61-70	23	12.0
	Over 70	10	5.2
	Chose not to disclose	38	19.9
	Total	191	100
Gender	Male	20	10.5
	Female	130	68.0
	Other	2	1.0
	Chose not to disclose	39	20.4
	Total	191	100
Education	Primary school	1	0.5
	High school	23	12.0
	Trade/diploma	48	25.1
	Bachelor's degree	42	22.0
	Postgraduate degree	49	34.8
	Chose not to disclose	29	15.2
	Total	191	100
Nationality	Australian	132	69.1
	Aboriginal	1	0.5

	Other	13	6.8
	Chose not to disclose	45	23.6
	Total	191	100
History of mental illness	Yes	58	30.4
	No	72	37.7
	Chose not to disclose	61	31.9
	Total	191	100
Meditation experience	Yes	102	53.4
	No	20	10.5
	Chose not to disclose	69	36.1
	Total	191	100

This table presents the demographic characteristics of the study participants, including age, gender, education level, nationality, history of mental illness, and meditation experience. Participants were predominantly in the 51-60 age range (28.8%), with 19.9% choosing not to disclose their age. The sample was largely female (68.0%), with 20.4% not disclosing their gender. Most participants had a postgraduate degree (34.8%), followed by trade/diploma level qualifications (25.1%). The majority were Australian (69.1%), with 23.6% choosing not to disclose their nationality. 30.4% of participants reported a history of mental illness, while 31.9% chose not to disclose this information. 53.4% of participants had prior meditation experience, and 36.1% chose not to disclose their meditation background.

2.6 Data Analysis

A qualitative thematic analysis was performed based on the answers to these seven questions based on Braun and Clarke's approach [31]. The process involved:

1. Familiarisation with the data through repeated reading of participants' responses.
2. Generating initial codes from the data using NVivo software, which were categorised into either "barriers" or "facilitators" of meditation.
3. Grouping similar codes into potential subthemes, and then organising these subthemes into broader overarching themes.
4. Revising the themes and subthemes through iterative review to ensure they accurately represented the data.
5. Reviewing and validating the findings with another researcher.
6. Presenting the findings.

2.7 Ethical Considerations

The University of Sydney's Human Research Ethics Committee (HREC) gave approval in 2023 for this project: (Ethics Approval no: 2023/HE000578).

3. Results

3.1 Demographics

In total 191 participants completed the pre-challenge survey, with 94 of these also completing the post-challenge surveys. Most participants were female (68.0%) and a large proportion fell within the 51-60 age range (28.8%). Notably, 17.8% were aged between 41-50 years 12.0% between 61-70 years. Most participants had prior meditation experience (53.4%) and identified as Australian (69.1%). 34.8% held postgraduate degrees. Additionally, 30.4% reported a history of mental illness, with 31.9% choosing not to disclose. This highlights that the study primarily involved middle-aged, educated women with experience in meditation. Key demographic data is shown in Table 1 and complete demographic data is shown in Appendix A.

3.2 Perceived Barriers to Meditation

3.2.1 Summary of Themes and Sub-Themes

Two overarching themes emerged from the data related to barriers: Practical challenges and mental health related challenges. These themes and corresponding sub-themes are described in Figure 1.

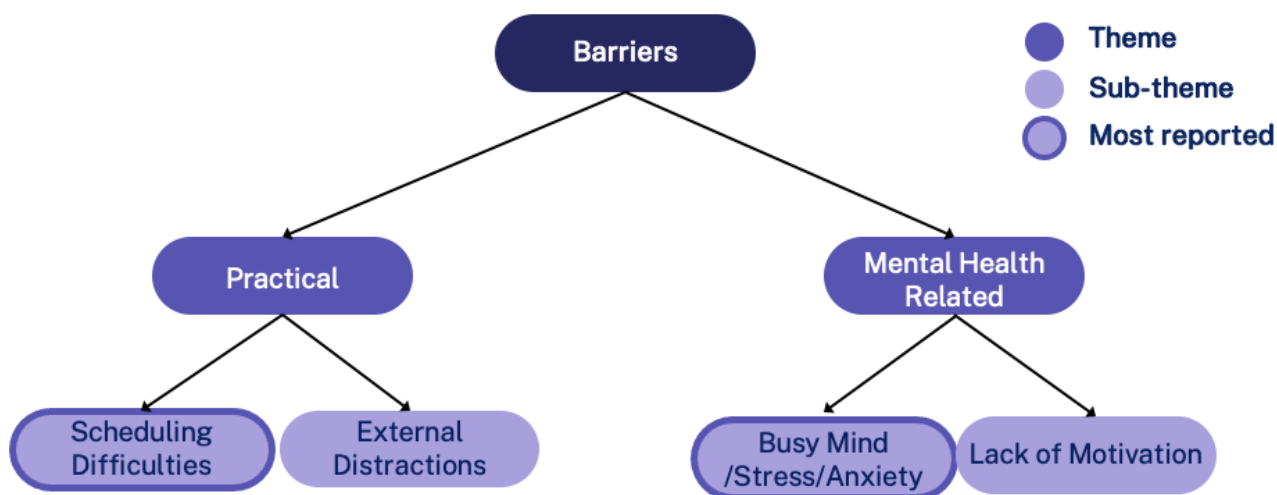


Figure 1 Themes and Sub-themes of Barriers to Meditation. This diagram shows the main themes and sub-themes identified as barriers to meditation. The two primary themes are 'Practical Barriers' and 'Mental Health-Related Barriers.' Under 'Practical Barriers,' the sub-themes include 'Scheduling Difficulties' and 'External Distractions.' Under 'Mental Health-Related Barriers,' the sub-themes include 'Busy Mind, Stress and Anxiety,' and 'Lack of Motivation'. The two most reported barriers were 'Scheduling Difficulties' and 'Busy Mind, Stress and Anxiety'.

3.2.2 Theme 1: Practical Challenges

Subtheme 1 - Scheduling difficulties: The most prominent barrier reported was scheduling difficulties. Participants frequently attributed this to other priorities, such as work commitments and family responsibilities (P28: *"I don't seem to prioritise it, even though I know how beneficial it*

is. I often find I'm "too busy"- work, childcare, home duties and prioritise those.""). Many participants stated that numerous tasks often competed for a limited time slot (P17: *"Kids, working early, fitting morning routine in and priority around activity in morning e.g. yoga, running or meditation."*). A few individuals expressed that they simply forget to meditate despite wanting to (P190: *"I would like to do it every day but I actually forget to put in my routine."*). A few reported feeling guilty about prioritising themselves amongst other responsibilities (P5: *"I feel guilty making time for myself."*). Participants were frustrated that they could not schedule time for meditation despite understanding its benefits (P37: *"When I am very tired or do not have enough time to meditate in the mornings, I get quite annoyed with myself, as I do value the overall benefits of meditation"*).).

Subtheme 2 - External distractions: Some participants found it difficult to achieve a meditative state due to difficulty locating a quiet environment (P207: *"[I] find it too hard to get into the flow so [I] give up, can't find an appropriate quiet space"*). Others said family interruptions and digital distractions hindered their practice (P162: *"[Barriers are] finding a moment alone while having young kids."*). (P115: *"Barriers to meditating are the allure of the TV, Netflix, talking, mobile phones."*).

3.2.3 Theme 2: Mental Health Related Challenges

Subtheme 1 - Busy mind, anxiety, and stress: Many participants reported finding it challenging to meditate due to a restless mind with distracting thoughts, exacerbated by anxiety and stress (P79: *"Busy mind can sometimes make it harder to quieten into meditation."*). (P77: *"I can get too caught up in the list of things that need to be done and unintentionally be less present or meditative."*). However, many participants recognised that training the busy mind is a fundamental part of meditation and improves with practice (P79: *"Any barriers are part of the practice, i.e., meditation for me is being aware of the distractions and observing what draws my attention."*). (P4: *"It is normal for it to feel uncomfortable. Even for people who have meditated for years it can be challenging to sit still for a period each day, but like anything, with practice it does get easier."*). Some participants reported that meditation could amplify thoughts they tried to suppress during the day (P72: *"[Meditation] brings up thoughts about the day I have tried to stop thinking about."*). Many participants reported that meditation became more challenging when anxiety or stress was present, yet several expressed that meditation was also most beneficial in these moments. (P18: *"Too stressed to be able to relax into meditation. When I am stressed and busy I need it the most but sometimes I can't find the time or settle enough to meditate."*).

For one participant, meditation unearthed deep mental illness symptoms. (P204: *"Meditation isn't always relaxing for me - it means that sometimes difficult feelings and emotions from past trauma arise. Knowing this can sometimes mean I will put off my meditation practice."*).

Subtheme 2 - Lack of motivation: Some participants reported that they lacked motivation to meditate despite understanding its benefits (P58: *"I am just not making an effort to do it, even though I want to do it."*). Some report frustration at themselves for procrastinating on meditation (P34: *"No negative other than being upset with myself that I'm feeling lazy that I don't do more meditation often. I know I like it and it's beneficial, but I can't get out of my own way to continue regularly."*).

3.3 Perceived Facilitators to Meditation

3.3.1 Summary of Themes and Sub-Themes

Three overarching themes emerged from the data related to facilitators to meditation: Manageable goal setting, mindset, and guidance and community. These are described in Figure 2.

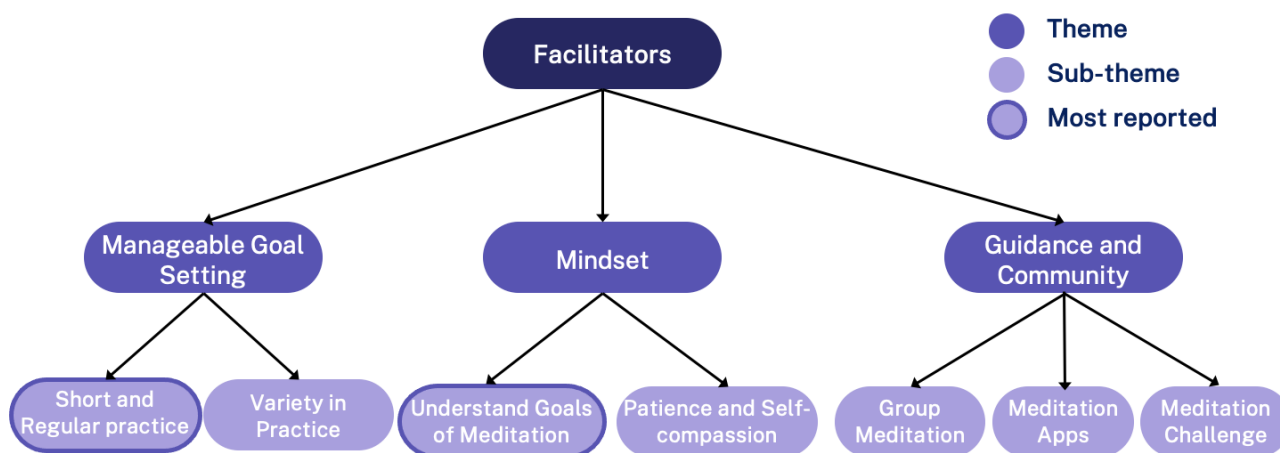


Figure 2 Themes and Sub-themes of Facilitators to Meditation. This diagram illustrates the main themes and sub-themes identified as facilitators to meditation. The three primary themes are ‘Manageable Goal Setting’, ‘Mindset’, and ‘Guidance and Community’. Under ‘Manageable Goal Setting’, the sub-themes include ‘Short and Regular Practice’ and ‘Variety in Practice’. Under ‘Mindset’, the sub-themes include ‘Understand Goals of Meditation’ and ‘Patience and Self-Compassion’. Under ‘Guidance and Community’, the sub-themes include ‘Group Meditation’, ‘Meditation Apps’, and ‘Meditation Challenge’ (which includes insights regarding the structure of the UMC and OMM challenges).

3.3.2 Theme 1: Manageable Goal Setting

Subtheme 1 - Short and regular practice: Many participants stressed the benefit of engaging in short and consistent meditation sessions particularly when starting to meditate, as it is a more manageable commitment. Participants highlighted the misconceptions around meditation (P12: *“There is a perception that it is overly complicated and lengthy to work.”*). Participants shared how even a short meditation could have a significant impact (P31: *“It’s so simple. Just a few minutes sitting quietly and focusing on your breathing... makes a massive difference to how you feel, think, and function.”*). They also emphasised that prioritising consistency with shorter sessions is more effective than sporadic attempts at meditating (P140: *“just start and commit to making it regular as opposed to very long.”*). They suggested that this approach generates momentum, naturally building towards longer sessions (P207: *“Just start by sitting for 10 minutes every day. But it’s important that you do it regularly [...]. It will develop into longer by itself. Don’t make it a huge task.”*). Participants recommended setting aside a specific time for meditation (P141: *“I recommend people to set a manageable routine. Set a specific time and do it even when you don’t feel you need it, as that’s when you need it the most.”*).

Subtheme 2 - Variety: Participants encouraged newcomers to explore different meditation techniques to discover what resonates with them (P166: *"Try a few different methods, times of the day, etc and find something that works for you."*). They highlighted the variety of options available (P196: *"There are so many different ways of meditating and practising mindfulness. It really is for everyone; you just need to find the right method for you and simply give it a try."*). Participants advised individuals to not compare their practice to others or personal expectations of what meditation should be (P35: *"Meditation is a very personal journey that does not have a rulebook attached. [...] Don't be limited by other people's experience, it is your own personal journey that should be free of judgement, especially from oneself."*).

3.3.3 Theme 2: Mindset

Subtheme 1 - Understand goals of meditation: Participants emphasised the importance of understanding that the goal of meditation is not to suppress thoughts, but to accept and be aware of thoughts as they arise (P173: *"Don't worry about getting rid of thoughts in the mind, that's not what it's about."*). Several participants referenced the "monkey mind" (describing the wandering mind) as an essential part of meditation (P102: *"Monkey mind is part of mediation... even long-term meditators have bad days, where their mind will not be quiet. Do not let this dishearten you."*). Participants stated that the key to meditation is to notice when the mind wanders and gently guide it back, suggesting that this is a skill that improves with practice (P51: *"My friend was frustrated that her mind kept wandering. I told her, 'That's exactly what meditation is, so you're actually a master at it!' The 'recognising' is the practice. It just so happens that the more you do it, the less 'bringing back' you need to do."*). Some participants stated that observing negative feelings that arise during meditation is an essential part of the practice (P199: *"Sometimes meditation is all about the discomfort and learning to allow negative thoughts or sensations to pass through you."*). This approach encourages individuals to notice and understand their mental patterns, which helps manage anxiety caused by their thoughts (P100: *"Distracting thoughts are a part of meditation. It allows us to develop an awareness of thoughts from the past or about the future. This awareness can help to mitigate anxiety caused from ruminating thoughts."*).

Subtheme 2 - Patience and self-compassion: Participants suggested that meditation is challenging and requires practice (P1: *"Every meditation is a good meditation. I would suggest that meditation is like everything in life, and it takes practice to get better at it, and to deepen its experience"*). They encouraged others to have patience and self-compassion when learning to meditate (P183: *"Give yourself time, be kind and gentle to yourself; training the mind is like training a small puppy, it takes time, care and determination but you will get there."*). Many participants expressed that their initial challenges became easier with practice, allowing meditation to gradually become an essential part of their lives (P209: *"Initially (5 years ago) learning to meditate was a task, so time and effort were then a barrier. Once it became my purpose it is as essential to me as breathing."*).

3.3.4 Theme 3: Guidance and Community

Subtheme 1 - Group meditation: Participants were recruited for this study from MeditationHQ, a group meditation platform, so it is unsurprising that many participants enjoyed group meditation. They stated that it increased accountability and promoted consistent practice (P21: *"Join a group or*

set aside a specific time, so that you are motivated and don't put it off.”). For some individuals, group meditation deepened the practice compared to the experience of meditating alone (P99: *“I experience better motivation and impact of meditation by doing it in a group. [...] This depth of meditation and spiritual impact is higher than by myself.”*). Participants recommended group meditation to beginners, as it provides an opportunity to enter a space away from external distractions (P204: *“Starting meditation in a group environment can make it easier to do the first few times because it's so normal for your mind to wander and for it to feel uncomfortable when sitting still. It's something we aren't conditioned to do these days with the amount of stimulus that surrounds us from the moment we wake up to go to bed. Then after you've tried it in a group setting it might be easier to create a habit at home/solo.”*).

Subtheme 2 - Meditation apps: Many participants supported meditation apps due to its accessibility and suitability for various lifestyles (P205: *“How easy it is to have meditations online in an app or downloaded. [...] having meditations downloaded on my phone means I can listen to them even when running out of internet reception.”*). Apps may also offer forms of accountability (P190: *“At the start of the year I joined an app & I like keeping my daily streak going!”*).

Subtheme 3 - Meditation challenge: There were various insights gained from comments about the meditation challenge itself. Several participants stated that they enjoyed being a part of the meditation challenge as it helped them create a meditation routine (P188: *“Being part of a programme, having that commitment to help embed [meditation] into regular practice.”*). They stated that the challenge was accessible (P65: *“Loved this meditation challenge program, it was so easy and accessible to pass on to others who might not have tried meditation.”*). They enjoyed the variety of meditations offered to participants (P37: *“Gained more variety and enjoyment in the themed meditations from MeditationHQ.”*). Participants enjoyed the social connection it offered with others who participated in the challenge (P49: *“I enjoyed doing it with others and hope they find the benefits from a daily practice, like I have.”*).

4. Discussion

4.1 Interpretation of Findings

This study identified the barriers and facilitators associated with meditation in a general population participant group. While existing research focusses on the efficacy of meditation within specific groups, these findings often do not translate to adoption in everyday life. Although interest in meditation is growing, there remains a gap in the understanding of strategies to incorporate meditation into daily lives, despite its potential to support public mental health.

The most reported barrier to meditation was scheduling difficulties. This reflects the tension between participants recognising its benefits and the practical challenges of integrating it into their daily lives. In contrast, the main facilitator participants identified was to prioritise short and consistent sessions, particularly when beginning to meditate. Educating individuals on the advantages of a brief but regular practice may increase the feasibility and sustainability of meditation as an everyday practice. Findings from this study aligns with other studies that highlight time management issues as a significant barriers to regular practice [23-25, 32].

The second most identified barrier was a busy mind, exacerbated by stress and anxiety. Participants often perceived the wandering mind as a negative and distracting element of their meditation practice. In contrast, a key facilitator was understanding the true goals of meditation -

that the wandering mind is not only expected but is a fundamental part of the practice. Given that human minds have a natural tendency to wander, meditation is positively challenging as it requires effort to bring the mind back to the present, and repeated practice allows this skill to improve, enabling increased mindfulness over time [9]. This challenge contributes to the positive benefits of meditation, including stress reduction, emotional regulation, and increased resilience [33]. Many participants found meditation particularly useful during periods of high stress and anxiety, supporting research that recognises meditation as a valuable tool for alleviating these symptoms [34]. Similarly, nurses participating in a mindfulness-based intervention also reported the restless mind as an initial challenge that tended to peak early and diminish throughout the 8-week intervention [26]. By identifying and validating similar patterns in a general population sample, our study reinforces the relevance of these findings beyond certain groups and affirms their importance for public health planning. Educating individuals about the inevitability and integral role of a "busy mind" in meditation can improve understanding and appreciation of this aspect of their practice, thereby facilitating greater adherence and benefit from meditation.

Our findings can also be understood through the Co-emergence Model of Reinforcement (CMR) [35], which provides a neurophenomenological explanation of how mindfulness supports emotional regulation. The CMR proposes that it is not external stimuli or consequences that drive behaviour, but rather the internal interoceptive sensations that arise alongside them [35]. Impaired interoceptive awareness is thought to contribute to emotional dysregulation, while mindfulness interrupts this cycle by cultivating equanimity (non-reactive awareness) towards these sensations which reduces emotional reactivity and enables more adaptive responses [35]. In our study, participants who described learning to sit with negative feelings such as anxiety without reacting appeared to be engaging in this very process.

This study also provides insight into valuable supplementary tools that can enhance meditation engagement, such as group meditation and mobile guided meditation apps. Research supports the efficacy of mobile apps for increasing meditation engagement in various populations, highlighting the flexibility and accessibility of these apps which made it easier for users to integrate meditation into their daily routines [25, 26, 36]. Many participants reported that the group settings provided accountability and motivation which supported their meditation practice. Further research could investigate the mechanisms and benefits of group meditation, as there is limited research on this subject. Both guided meditation apps and group meditation are external tools this study has demonstrated is facilitative to regular practice. Awareness of the benefits of these tools could be increased through promotion in settings such as schools, workplaces, and general practice clinics. Examples include offering brief, guided meditations during break times or as part of a meditation toolkit could increase accessibility to practice.

More broadly, supporting regular meditation practice aligns with preventive mental health approaches by improving emotional regulation, reducing stress-related absenteeism, and promoting resilience. Given the rising burden of anxiety and depression, meditation may serve as a low-cost adjunct to existing public health initiatives. This is particularly relevant in contexts such as primary care and community mental health, where scalable, non-pharmacological interventions are needed. Integrating meditation strategies into routine care could alleviate pressure on overstretched mental health services while empowering individuals with self-regulation tools. Moreover, public awareness campaigns that normalise meditation could shift societal attitudes and promote earlier, proactive, and more consistent engagement with mental health practices.

It is important to note that one participant experienced an amplification of past trauma during meditation. While such occurrences are rare, they can have serious implications and require attention. Research has documented adverse events related to meditation, particularly among individuals with a history of psychiatric issues [37]. As meditation gains popularity, the potential for adverse events increases, suggesting the need for careful management of meditation practices in certain populations. Future interventions could include screening procedures for trauma history and ensure facilitators are trained to teach meditation accurately and respond to distress sensitively. Accessible resources for post-meditation support may be particularly important in vulnerable groups.

4.2 Limitations

This study has several limitations. The sample cannot be considered representative of the general population, featuring a high number of females, individuals with prior meditation experience, middle-aged participants, and those with higher education levels. The demographic skew is largely due to the recruitment method through MeditationHQ, which attracted individuals already engaged or interested in their group meditation sessions. The specific context of MeditationHQ may not fully represent the experiences of individuals who practice independently, use different meditation resources, or reside in areas not local to their meditation groups. Therefore, the findings may not accurately reflect the barriers and facilitators experienced by a broader, more diverse population, particularly those new to meditation or come from different educational and demographic backgrounds. While the overrepresentation of women in this sample may reflect recruitment bias, it also aligns with studies conducted in countries like the United States which suggest that women are more likely than men to engage in meditation practices [38]. Future research might wish to explore the underlying reasons for lower male participation and identify strategies to better engage men in meditation.

Voluntary participation also introduced self-selection bias. The 15-20-minute-long meditations carried high respondent burden and may have deterred less motivated individuals, leading to a sample skewed towards those who are most enthusiastic about meditation. This group may have been more inclined to share their positive experiences, pass on advice, and downplay the challenges they experienced. To reduce response bias, the survey was anonymous; however, this issue may still affect the results.

Future research should target more diverse ages, males, culturally and linguistically diverse groups, and those with no prior exposure to meditation. Partnerships with schools, multicultural centres, and community organisations could improve reach and representation. Active recruitment strategies could include advertising through community newsletters and cultural networks, and direct engagement via social media platforms tailored to underrepresented demographics. Additionally, offering incentives, simplifying participation procedures, and providing multilingual materials may help reduce barriers to participation.

Conducting in person interviews could also provide more nuanced insights into the barriers and facilitators to meditation. Unlike online surveys, interviews enable individualised follow-up prompts which allows for greater flexibility in exploring personal narratives and clarification of ambiguous responses. Interviews could uncover how specific types, frequencies, and durations of meditation, as well as different external supporting tools (e.g. meditation classes, apps, and groups), can align

with various lifestyles. This offers a more comprehensive understanding of the factors influencing meditation practice.

5. Conclusion

Confusion about the purpose and process of meditation represents a major barrier for many individuals. A common misconception is that meditation requires an ideal setting or specific mental state to begin with, which leads individuals to delay or abandon practice when these conditions aren't met. This misunderstanding that meditation can only be effective when one is in the "right frame of mind", as one participant put it, can reinforce feelings of inadequacy or failure, especially for beginners. Many people mistakenly interpret a busy or distracted mind as a sign that they are doing it wrong, when in fact, it is an expected part of the process. As participants and literature affirm, meditation is a practice that often contrasts with the default state of inattention, reactivity, and automaticity that people experience, and hence it can be challenging to begin with [39]. It is a skill that gradually improves through regular practice and helps individuals navigate difficult thoughts and emotions. Clarifying these misconceptions and normalising challenges is a vital first step in improving access and engagement with meditation as a public health strategy.

This study identifies key facilitators, such as short, regular practice, mindset reframing, and community support, that can significantly enhance engagement. These findings can inform the development of educational resources and behaviour change strategies designed for scalability in schools, clinics, and workplaces. The broader societal implications of widespread meditation practice include reduced burden on healthcare systems and enhanced emotional resilience across diverse communities.

While this study offers important insights, its limitations must be acknowledged. The sample was predominantly middle-aged, female, highly educated, and had prior meditation experience, hence limiting its generalisability. Future research should not only aim for demographic diversity through active recruitment strategies, but also explore how meditation experiences and barriers differ across cultural, gender, and age groups. Researchers should recruit participants from a variety of demographic backgrounds, including different genders, ages, educational levels, and levels of meditation experience. This can be achieved through targeted outreach in diverse communities and online platforms.

To evaluate and scale promising interventions, further research should include pre-post studies of educational tools created from the strategies identified in this study, tracking changes in meditation frequency, duration, and motivation. This next step is essential to ensuring these strategies are evidence-based and effective in responding to the diverse needs of the public.

5.1 Relevance for Clinical Practice

Meditation is an accessible tool that can support public mental health, particularly as stress, anxiety and other mental health challenges become more prevalent. The findings of this study offer valuable insights for creating educational tools to encourage regular meditation practice.

Key strategies identified based on common perceived barriers and facilitators included:

- Normalise the challenge of finding time for meditation and promote a short yet consistent practice to sustainably integrate meditation into daily routines.

- Promote understanding that the busy mind is a normal and fundamental part of meditation that is key to many of its benefits. Educate individuals that the goal of meditation is to observe rather than suppress thoughts.
- Recommend tools like meditation apps and local group meditation centres, which can provide accessibility, accountability, and motivation to maintain a regular practice.

By addressing common challenges and facilitators, these strategies can enhance the uptake and adherence to meditation and proactively support the mental health of the general population. Educating people about this and the other results from this research will make it more understood and more widely used. It will also strengthen organisations that promote meditation, such as the University of Technology's Meditation and Mindfulness Centre, MeditationHQ, Lifeline and the many hospitals and community centres that also do this work.

Appendix

Appendix A

Full Demographic Characteristics of Study Participants.

	Description	Number	Percentage
Age	Under 18	2	1.0
	18-30	14	7.3
	31-40	15	7.9
	41-50	34	17.8
	51-60	55	28.8
	61-70	23	12.0
	Over 70	10	5.2
	Chose not to disclose	38	19.9
	Total	191	100
Gender	Male	20	10.5
	Female	130	68.0
	Other	2	1.0
	Chose not to disclose	39	20.4
	Total	191	100
Education	Primary school	1	0.5
	High school	23	12.0
	Trade/diploma	48	25.1
	Bachelor's degree	42	22.0
	Postgraduate degree	49	34.8
	Chose not to disclose	29	15.2
	Total	191	100
Nationality	Australian	132	69.1
	Aboriginal	1	0.5
	Other	13	6.8
	Chose not to disclose	45	23.6

	Total	191	100
History of mental illness	Yes	58	30.4
	No	72	37.7
	Chose not to disclose	61	31.9
	Total	191	100
Meditation experience	Yes	102	53.4
	No	20	10.5
	Chose not to disclose	69	36.1
	Total	191	100
Marital status	Single, never married	25	13.0
	Married or de facto	84	44.0
	Separated	12	6.3
	Divorced	24	12.6
	Widowed	7	3.7
	Chose not to disclose	41	21.5
	Total	191	100
Number of children	None	40	20.9
	One	16	8.4
	Two	55	28.8
	Three	31	16.2
	Four	8	4.2
	Five	1	0.5
	Six	1	0.5
	Chose not to disclose	39	20.4
	Total	191	100
Religion	Christian	47	24.6
	Jewish	0	0.0
	Muslim	0	0.0
	Buddhist	6	3.1
	Hindu	1	0.5
	Atheist	10	5.2
	Agnostic	8	4.2
	No formal religion	77	40.3
	Other	6	3.1
	Chose not to disclose	36	18.8
	Total	191	100

This table presents the age, gender, education level, nationality, history of mental illness, meditation experience, marital status, number of children, and religion of respondents to the OMM Challenge survey.

Author Contributions

Dr Lea and Dr Shires worked on the study concept, design and material preparation. Dr Lea developed the survey, advertisement, Participant Information Statement, Consent Form and gained

ethics approval. Dr Lea used a research database to collect and collate the results. Dr Lea liaised with Dr Shires, MeditationHQ, the participants, and supervised Ms Cheng. Data analysis and the write up of the manuscript was conducted by Ms Cheng under Dr Lea's supervision. Dr Shires recommended the right manuscript to publish the work in. Dr Lea oversaw the whole project from start to completion and was the Chief Investigator. All three authors edited and approved the final manuscript.

Competing Interests

The authors have declared that no competing interests exist.

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